

What is claimed is:

1. A method for enabling software and firmware downloads to high definition television appliances, comprising:

forwarding a download control message to a television terminal associated with a high definition television appliance, said download control message comprising: (i) a first version identifier which identifies a version of an available software or firmware download; (ii) a first type identifier which identifies a particular type of high definition television appliance for which said download is intended; and (iii) a download object containing said software or firmware to be downloaded;

enabling said terminal to obtain a second type identifier from said high definition television appliance that identifies the type of said high definition television appliance;

comparing said first and second type identifiers;

if said first and second identifiers correspond, enabling said television terminal to obtain a second version identifier from said high definition television appliance identifying a current version of software or firmware of said high definition television appliance;

comparing said first version identifier to said second version identifier; and

if said first version identifier does not correspond to said second version identifier, passing the download object from said television terminal to said high definition television appliance.

2. A method in accordance with claim 1, wherein:

said first version identifier identifies an updated version of software or firmware as compared to said current version of software or firmware.

3. A method in accordance with claim 1, wherein:

in the event that said first version identifier identifies an older version of software or firmware as compared to said current version of software or firmware, said download object is not passed to said high definition television appliance.

4. A method in accordance with claim 1, wherein:

the download object is passed from the television terminal to said high definition television appliance via one of a digital visual interface or a high definition multimedia interface.

5. A method in accordance with claim 1, further comprising:

providing an authorization check prior to passing said download object to said high definition television appliance.

6. A method in accordance with claim 1, further comprising:

providing for authentication between a download source and the television terminal.

7. A method in accordance with claim 1, wherein:

said download control message comprises a segmented message.

8. A method in accordance with claim 7, wherein said download control message further comprises a cyclic redundancy check (CRC) trailer to enable verification that each segment of said download is received.

9. A method in accordance with claim 1, further comprising:

determining by said terminal whether said associated high definition television appliance supports downloads of software or firmware; and

reporting from the terminal to a download source whether said high definition television appliance supports downloads.

10. A method in accordance with claim 1, further comprising:

enabling the download control message to pass directly to the high definition television appliance from the download source via the television terminal without processing by said television terminal.

11. A method in accordance with claim 1, wherein:

said current version of software or firmware is stored in a first storage location; and  
said download software or firmware is stored in a second storage location.

12. A method in accordance with claim 11, further comprising:

verifying the robustness of the downloaded software or firmware;  
if said robustness is verified, rebooting said high definition television appliance and loading the downloaded software or firmware from said second storage location; and  
if said downloaded software or firmware is not operable, reverting to said software or firmware in said first storage location.

13. A method in accordance with claim 1, further comprising:

reporting a status of the download back to the download source.

14. A method in accordance with claim 1, further comprising:

generating a graphical user interface on said high definition television appliance to inform a user that said download is available; and  
enabling a user to accept or refuse said download.

15. A method in accordance with claim 14, wherein said download is provided for a fee.

16. A method in accordance with claim 1, further comprising:

modifying a monitor descriptor block of Extended Display Identification Data (EDID) at said high definition television appliance to include said second version identifier.

17. A method in accordance with claim 16, further comprising:

further modifying said monitor descriptor block to include indicators for at least one of download available, start download, download complete, download error, authentication failed, insufficient space for download, flash error, and hardware error.

18. A system for enabling software and firmware downloads to high definition television appliances, comprising:

a download source for creating and transmitting a download control message, said download control message comprising: (i) a first version identifier which identifies a version of an available software or firmware download; (ii) a first type identifier which identifies a particular type of high definition television appliance for which said download is intended; and (iii) a download object containing said software or firmware to be downloaded;

a television terminal for receiving said download control message; and

a high definition television appliance associated with said television terminal;

wherein:

said terminal obtains a second type identifier from said high definition television appliance that identifies the type of said high definition television appliance;

said terminal compares said first and second type identifiers;

if said first and second identifiers correspond, said television terminal obtains a second version identifier from said high definition television appliance which identifies a current version of software or firmware of said high definition television appliance;

said terminal compares said first version identifier to said second version identifier; and

if said first version identifier does not correspond to said second version identifier, the download object is passed from said television terminal to said high definition television appliance.

19. A system in accordance with claim 18, wherein:

said first version identifier identifies an updated version of software or firmware as compared to said current version of software or firmware.

20. A system in accordance with claim 18, wherein:

in the event that said first version identifier identifies an older version of software or firmware as compared to said current version of software or firmware, said download object is not passed to said high definition television appliance.

21. A system in accordance with claim 18, further comprising:

one of a digital visual interface or a high definition multimedia interface between the television terminal and said high definition television appliance.

22. A system in accordance with claim 18, wherein:

said terminal provides an authorization check prior to passing said download object to said high definition television appliance.

23. A system in accordance with claim 18, wherein:

said terminal provides for authentication between a download source and the television terminal.

24. A system in accordance with claim 18, wherein:

said download control message comprises a segmented message.

25. A system in accordance with claim 24, wherein said download control message further comprises a cyclic redundancy check (CRC) trailer to enable verification that each segment of said download is received.

26. A system in accordance with claim 18, wherein:

said terminal determines whether said associated high definition television appliance supports downloads of software or firmware; and

said terminal reports back to the download source whether said high definition television appliance supports downloads.

27. A system in accordance with claim 18, wherein:

the download control message is enabled to pass directly to the high definition television appliance from the download source via the television terminal without processing by said television terminal.

28. A system in accordance with claim 18, further comprising:

a first storage location for storing said current version of software or firmware; and  
a second storage location for storing said download software or firmware.

29. A system in accordance with claim 28, wherein:

said high definition television verifies the robustness of the downloaded software or firmware;

if said robustness is verified, said high definition television appliance reboots and loads the downloaded software or firmware from said second storage location; and

if said downloaded software or firmware is not operable, said high definition television appliance reverts to said software or firmware in said first storage location.

30. A system in accordance with claim 18, wherein:

said terminal reports a status of the download back to the download source.

31. A system in accordance with claim 18, wherein:

a graphical user interface is provided on said high definition television appliance to inform a user that said download is available; and

a user is enabled to accept or refuse said download via said user interface.

32. A system in accordance with claim 31, wherein said download is provided for a fee.

33. A system in accordance with claim 18, wherein a monitor descriptor block of Extended Display Identification Data (EDID) is modified at said high definition television appliance to include said second version identifier.

34. A system in accordance with claim 33, wherein:

said monitor descriptor block is further modified to include indicators for at least one of download available, start download, download complete, download error, authentication failed, insufficient space for download, flash error, and hardware error.

35. A high definition television appliance adapted for receiving software or firmware downloads, comprising:

one of a digital visual interface or a high definition multimedia interface for enabling communication with a television terminal;

a first memory location containing Extended Display Identification Data (EDID) having a monitor descriptor block modified to include a first version identifier identifying a current version of software or firmware running on said high definition television appliance;

a second memory location containing said current version of software or firmware;  
and

a processor for executing said current version of software or firmware;

wherein:

said terminal is adapted to receive a download control message from a download source, said download control message comprising: (i) a first version identifier which identifies a version of an available software or firmware download; (ii) a first type identifier which identifies a particular type of high definition television appliance for which said download is intended; and (iii) a download object containing said software or firmware to be downloaded;

said terminal is adapted to obtain a second type identifier from said high definition television appliance that identifies the type of said high definition television appliance;

said terminal is adapted to compare said first and second type identifiers;

if said first and second identifiers correspond, said television terminal is adapted to obtain a second version identifier from said high definition television appliance which identifies said current version of software or firmware of said high definition television appliance;

said terminal is adapted to compare said first version identifier to said second version identifier; and

if said first version identifier does not correspond to said second version identifier, said terminal is adapted to pass the download object to said high definition television appliance via one of said digital visual interface or said high definition multimedia interface.

36. A high definition television appliance in accordance with claim 35, wherein:

said monitor descriptor block is further modified to include indicators for at least one of download available, start download, download complete, download error, authentication failed, insufficient space for download, flash error, and hardware error.

37. A high definition television appliance in accordance with claim 35, wherein:

said first version identifier identifies an updated version of software or firmware as compared to said current version of software or firmware.

38. A high definition television appliance in accordance with claim 35, wherein:

in the event that said first version identifier identifies an older version of software or firmware as compared to said current version of software or firmware, said download object is not passed to said high definition television appliance.